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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,919	05/10/2001	Qingsheng Zhu	279.330US1	4736

21186 7590 06/16/2005

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EXAMINER

OROPEZA, FRANCES P

ART UNIT PAPER NUMBER

3762

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/852,919

Applicant(s)

ZHU ET AL.

Examiner

Frances P. Oropeza

Art Unit

3762

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 May 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_

13. ☐ Other: \_\_\_\_\_

*Angela D. Sykes*

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ART UNIT 3762

6/13/05

Continuation of 11. does NOT place the application in condition for allowance because:

The Applicant's remarks filed 5/18/05 have been fully considered, but they are not convincing.

The Applicant asserts Hauck teaches away from the instant invention. The Examiner disagrees. While as the applicant notes Hauck teaches about increasing collagen levels and promote angiogenesis (col. 3 @ 42-45; col 6 @ 57-62), it is recognized the use of the device to increase collagen and promote angiogenesis are but two of many uses for the device to remodel the cardiac tissue (col. 1 @ 18-21; col. 4 @ 14-16). These teachings of increased collagen production and promoting angiogenesis are not read to limit the device solely to increasing collagen production and promoting angiogenesis. The Hauck reference provides many teachings on safely and effectively using therapeutic electrical current to create electrical fields. The Hauck reference was included in the rejection of record to teach: delivering sub-stimulation pulses in association with atrial or ventricular depolarization, using an electrode patch, using electrodes on leads in coronary vessels to create the electrical fields, sensing heart rhythms, delivering stimulation after the depolarization, providing electrical field spacing about 10 seconds apart, providing two electrodes on the same lead, generating the electrical field during a refractory period at a higher strength and generating the electrical field during a non-refractory period at a lower strength, and a controller and therapy circuit to provide heart rhythm management.

In response to the Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 R.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *in re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation to combine was provided for each rejection. The rejection and motivation to combine have been reviewed and are deemed appropriate. Please see the rejection of record mailed 2/15/05, pages 2-6.

The Applicant asserts that Chekanov teaches cardiac electrical stimulation, hence Chekanov does not teach sub-threshold stimulation. The Examiner disagrees. Chekanov teaches cardiac electrical stimulation and sub-threshold stimulation (col.1 @ 46-51). Based on the more limited view by the Applicant of the Chekanov device being used only for electrical stimulation, the Applicant asserts the combined Hauck and Chekanov device would be unsatisfactory for its intended use. The Examiner disagrees. Like Hauck, Chekanov teaches sub-threshold stimulation (col. 1 @ 46-51), hence the combined references would create an apparatus and method satisfactory for its intended use.

The Applicant asserts Chekanov teaches placing the device outside of the skeletal muscle (col. 2 @ 39-44). The Examiner is unable to find this citation, and is unclear about the point being made by the Applicant, hence no response is provided.

As to claims 6 and 17, the rejection of record outlines the teachings by Hauck and the teachings of the instant invention, both inventions teaching that the stimulation frequency has a significant range based on different patient needs. The frequency range taught by the instant invention and Hauck overlap. As noted in the rejection of record, it is deemed appropriate to establish a patient appropriate stimulation pattern based on experimentation within range of the suggested stimulation frequency (first full paragraph on page 5 of the rejection of record). It is also noted and recognized the timed spacing of stimulation pulses is a factor considered in determining electrical field strength.

As to claim 15, the Applicant asserts Hauck does not teach two leads places in an anterior and lateral vein, the signal passing through a left marginal artery and the anterior interventricular artery. The Examiner disagrees. Hauck teaches the use of two leads (figures 1,3) and teaches placing the leads coronary vessels (col. 5 @ 23-26). As known in the implantable defibrillation electrode art (col. 6 @ 12-20), the anterior and lateral veins are coronary vessels commonly used for electrode implantation such that the signal passes through the left marginal artery and the anterior interventricular artery hence creating the electrical field.

The rejection of record stands.

JPO 6/13/05